

ABSTRACT

The present invention provides a CMOS area image sensor that makes it possible to prevent or reduce at least image quality degradation based on an inappropriate brightness distribution 5 that is produced in the pickup image and image degradation based on image distortion that is produced in the pickup image to obtain a high-quality pickup image. A plurality of pixels arranged in a lattice shape on the imaging face of the CMOS area image sensor are constituted by a photodiode 10, a select 10 transistor TRs for outputting accumulated electrical charge resulting from exposure from the photodiode 10, an electrical charge holding circuit comprising a capacitor C for temporarily holding the accumulated electrical charge from the photodiode 10 and a transfer transistor TRt for controlling the transfer 15 of the accumulated electrical charge to the capacitor C; and a reset transistor TRr for discharging the residual electrical charge of the capacitor C. The level of an inappropriate photoelectric conversion signal of each pixel arising from a non-uniform transmissive light amount distribution to the 20 imaging face of the imaging optical system as a result of the photoelectric conversion signal that is outputted by each pixel being multiplied by a vertical correction coefficient that is preset for each row and a horizontal correction coefficient that is preset for each column is corrected.